

In re Chang
Appln. No. 09/837,217

respectfully submitted that entry of the following Response and Amendment will place the claims in condition for Allowance.

IN THE CLAIMS:

Please replace pending claim 4 with amended claim 4 as follows:

a¹ 1. (Amended) A pharmaceutical composition for topical application at a site requiring new bone, cartilage or connective tissue formation in a subject, comprising a plurality of bone marrow stromal cells (MSCs) comprising a vector comprising a DNA sequence encoding BMP-2 operably linked to a promoter, and a pharmaceutically acceptable polymer.

a² 4. (Amended) The composition as recited in Claim 1 wherein the polymer is collagen type I.

5. (Amended) A method of enhancing new bone, cartilage or connective tissue formation in a subject, comprising:

- a. obtaining a plurality of bone marrow stromal cells (MSCs) from a subject;
- b. transducing the MSCs of step a) with a vector comprising a DNA sequence encoding BMP-2 operably linked to a promoter to generate BMP-2 protein producing MSCs; and
- c. topically applying the BMP-2 protein producing MSCs at a site requiring new bone, cartilage or connective tissue formation on the subject;

such that new bone, cartilage or connective tissue formation is enhanced.